

BAER GEOLOGIST (BAGE) - [Qualification Checklist](#)

Responsibilities

The BAER Geologist contributes to addressing post wildfire emergency watershed conditions by assessing fire effects on geologic processes, determining the natural range of variability upper limits for rock fall and mass wasting, identifying values at risk (life, property, and critical natural and cultural resources), and developing geomorphic treatments to avoid if possible an excessive watershed response.

- Assesses the burned area for fire effects to hydrologic and geomorphic processes and makes findings available to other users.
 - Documents and maps observations and findings.
 - Assesses post-wildfire geomorphic response.
 - Identifies wildfire-caused potential for mass wasting and rock fall hazards.
 - Compiles and interprets available geologic and geomorphic information.
 - Identifies values at risk from post-wildfire watershed conditions within and downstream of the burned area.
 - Determines if and where threats to human life, property and critical cultural and natural resources due to post-wildfire geomorphic conditions.
- Develops recommendations (if needed) for geologic emergency stabilization
 - Prepares treatment and monitoring specifications
 - Maps proposed treatment locations
- Coordinates with other BAER technical specialists and other agencies
- Compiles field notes and maps, data, digital photos, and daily unit logs for the record.
- Prepares the Geologic Resources presentation for public meetings and Agency Administrator close-out briefing.
- Obtains applicable management and safety information including fire behavior forecasts and the Incident Action Plan.
- Prepares the geologic presentations for public, agency administrator's and close-out meetings and briefing.
- Prepares and delivers the close-out briefing burned areas assessment summary.
- Prepares copies of the resource field assessment notes, maps and other draft materials and delivers them to the Documentation Specialist as part of the documentation package with sensitive data/notes identified and returned to the local specialists-not to be included in the official documentation package.

Skills/Knowledge

- Technical skill as a GS-09 Hydrologist, Geologist or Soil Scientist
- Knowledge of fire effects on watersheds.
- Knowledge of methods for estimating post-wildfire erosion, peak flows and mass wasting.
- Experience in mapping field information and using GPS and GIS.
- Knowledge of and familiarity with watershed stabilization techniques.
- Ability to quickly and efficiently locate and synthesize relevant technical information from local land use plans and local and community sources.
- Basic understanding of the potential effects of wildfire on natural and cultural resources and public health and safety.

Training

- Required
 - Annual Fire Safety Refresher Training
 - Introduction to Fire Behavior (S-190)
 - Fire fighter Training (S-130)
- Additional training which supports development of knowledge and skills
 - Introduction to Incident Command System (I-100)
 - Wildland Fire Suppression Orientation for Non-operations Personnel (S-110)
 - Basic Incident Command (I-200)
 - Introduction to Fire Effects (RX-310)
 - Interagency BAER Techniques course
 - GPS for ICS
 - GIS (Arcview or ArcGIS)
 - Interagency Helicopter Training Guide (S-271)
 - Burn Area Reflectance Classification

Prerequisite Experience

- Geologist (GEOL)
- One satisfactory performance as a BAER Geologist

Physical Fitness

- Light

Position currency can also be maintained by successful performance a Geologist (GEOL), BAER Soil Scientist (BASS), or BAER Hydrologist (BAHY).